

Geographic Review Panel 4 – San Joaquin River

Proposal number: 2001-K206

Short Proposal Title: San Joaquin River Salmon Aging Through Scales

1. Applicability to CALFED ERP Goals and Implementation Plan and CVPIA priorities, and relevance to ERP and CVPIA priorities for your region. This project could contribute to ERP Strategic goal 1 for at-risk species, and is consistent with a CVPIA monitoring objective to obtain additional population information that can be used to assess the efficacy of management and restoration actions. This proposal is especially important in the San Joaquin Basin where an extensive unread scale archive exists dating back to the early 1980s. If organized and read these data could be used to recreate more accurate cohort analysis that is currently based on adult fish size. This could be used to better evaluate the effect of past flow and other environmental conditions on salmon production in the San Joaquin Basin, and generate future adaptive management experiments.

2. Linkages/coordination with previously funded projects or other restoration activities in your region. Large-scale channel and floodplain restoration projects are currently underway on all three tributaries of the San Joaquin. Additionally, flow requirements on each of these systems are currently being evaluated. Creating and maintaining a cohort database derived from fish age structures, rather than fish length, is one additional monitoring tool that can be used to help evaluate the efficacy of management interventions by allowing more accurate analysis of the factors that contribute to salmon survival.

3. Feasibility, especially the project's ability to move forward in a timely and successful manner. TARP and individual reviews largely felt this was feasible given that a protocol for detection of annulus reabsorption can be developed. The TARP also thought the use of additional bony structures could be used to assist in calibration and validation.

4. Qualifications of the applicants and others involved in implementing the proposed project. Good, especially if an outside expert is used to assist in the validation and calibration of the results.

5. Local involvement (including environmental compliance). Local technical coordination will be a key component of the project.

6. Cost. Costs appear to be well justified.

7. Cost sharing. CDFG is providing \$70,000 of in-kind services. Panel is aware that applicant received approximately \$25,000 in funding from SJRMP for the same or similar activities, but this contribution was not identified in the proposal.

8. Additional comments. This TARP and this Panel believe this is a proposal worthy of continued funding. However, there are some recommendations that the applicant should consider. These are 1) a better description of how the annuli reabsorption will be evaluated, 2) consider using other bony parts in the annuli reabsorption evaluation, and 3) consider making acetate impressions from archived scales that are more effective to work with and also provide a backup.

Regional Ranking

Panel Ranking: High

Provide a brief explanation of your ranking: The TARP ranked this proposal as Very Good. This Panel believes the proposed assessment will provide important information that can be used by resource managers to better assess the effects of past management actions on salmon production, better inform future management actions, and pave the way for the assessment of future management actions intended to improve salmon production. These data could be used to create more accurate cohort analysis than is currently available. This could be used to better evaluate the effect of past flow and other environmental conditions on salmon production in the San Joaquin Basin, and generate future adaptive management experiments.